

IN THE CLAIMS

1-2. (Canceled).

3. (Currently amended) A method for evaluating polishing pad surface conditions as described in claim [[5]] 7,

wherein removal of polishing fluid adhered to said polishing pad surface is performed by flowing gas onto said polishing pad surface.

4-6. (Canceled).

7. (Currently amended) A method for evaluating polishing pad surface conditions ~~as described in claim 5~~ wherein ~~bi level conversion is performed on said image to obtain a bi level image and an area ratio of said bi level image is used to evaluate deterioration of said polishing pad surface~~ comprising the following steps:

removing polishing fluid adhered to a polishing pad surface for at least an area of said polishing pad surface;

illuminating with light said area of said polishing surface from which said polishing fluid was removed;

imaging said illuminated area by an optical imaging unit
and obtaining an image of said polishing pad surface;

evaluating deterioration of said polishing pad surface by
processing said surface image to convert said surface image
into a bi-level image, and by then using an area ratio of said
bi-level image to evaluate the deterioration of said polishing
pad surface; and

displaying results from said evaluation on a monitor.

8. (Currently amended) A method for evaluating
polishing pad surface conditions as described in claim [[5]]
7,

further comprising a step for outputting information of
said evaluation results to conditioning means for said
polishing pad.

9. (Currently amended) A method for evaluating
polishing pad surface conditions, ~~as described in claim 5,~~
~~further~~ comprising the following steps:

removing polishing fluid adhered to a polishing pad
surface for at least an area of said polishing pad surface;

illuminating with light said area of said polishing
surface from which said polishing fluid was removed;

imaging said illuminated area by an optical imaging unit
and obtaining an image of said polishing pad surface;
evaluating deterioration of said polishing pad surface by
processing said surface image;
displaying result from said evaluation on a monitor;
detecting fluorescence generated by said polishing pad
due to said illumination;
further evaluating deterioration of said polishing pad
surface based on an intensity signal of said detected
fluorescence; and
outputting results from said evaluation based on the
intensity signal.

10. (Previously Presented) A method for evaluating
polishing pad surface conditions as described in claim 9,
wherein a fluorescence image is obtained from the fluorescence
generated by said polishing pad; and deterioration due to
contaminants on said polishing pad surface is evaluated based
on said fluorescence image.

11-13. (Canceled).

14. (Currently amended) A device for evaluating polishing pad surface conditions as described in claim [[16]] 18, wherein

said polishing fluid removing means removes polishing fluid adhered to said polishing pad surface by blowing a gas onto said polishing pad surface.

15-17. (Canceled).

18. (Currently amended) A device for evaluating polishing pad surface conditions, comprising: as described in claim 16 wherein:

means for removing polishing fluid adhered to at least an area of a polishing pad surface;

means for illuminating said area on said polishing pad surface from which said polishing fluid was removed by said polishing fluid removing means;

means for capturing images of said area illuminated by said illuminating means and obtaining an image of said polishing pad surface;

first evaluating means for evaluating deterioration of said polishing pad surface by processing said image of said

polishing pad surface obtained through said image capturing means; and

first outputting means for outputting information of results from said evaluating means;

wherein said first evaluating means performs bi-level conversion on said image obtained through said image capturing means to provide a bi-level image; and

deterioration of said polishing pad surface is evaluated based on an area ratio of said bi-level image.

19. (Currently Amended) A device for evaluating polishing pad surface conditions as described in claim [[16]] 18, further comprising:

means for outputting-~~outputting~~ information of results from said evaluation to conditioning means for said polishing pad.

20. (Currently amended) A device for evaluating polishing pad surface conditions, ~~as described in claim 16,~~ ~~further~~ comprising:

means for removing polishing fluid adhered to at least an area of a polishing pad surface;

means for illuminating said area on said polishing pad surface from which said polishing fluid was removed by said polishing fluid removing means;

means for capturing images of said area illuminated by said illuminating means and obtaining an image of said polishing pad surface;

first evaluating means for evaluating deterioration of said polishing pad surface by processing said image of said polishing pad surface obtained through said image capturing means;

first outputting means for outputting information of results from said evaluating means;

means for detecting fluorescence generated by said polishing pad due to illumination from said illuminating means;

second evaluating means for evaluating deterioration of said polishing pad surface based on an intensity signal of fluorescence detected by said fluorescence detecting means;
and

second outputting means for outputting information of results from said evaluation.

21. (Previously Presented) A device for evaluating polishing pad surface conditions as described in claim 20, wherein said fluorescence detecting means obtains a fluorescence image; and said second evaluating means evaluates deterioration of said polishing pad surface due to contaminants based on the fluorescence image obtained by said fluorescence detecting means.

22. (Previously Presented) A device for evaluating polishing pad surface conditions as described in claim 20, wherein said second outputting means displays information of results evaluated by said second evaluating means to a display.

23-25. (Canceled).